PLANTAE COLOMBIANAE, V

Species nova generis Herrania.

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Recently, señor Gabriel Gutierrez, Agrónomo Auxiliar de la Sección de Biología Vegetal, kindly submitted to me for study a collection of *Herrania* from Santander. It represents an interesting new species, the description of which is presented below.

A very complete series of field data acccompanied the botanical specimen. These, as well as the plant material, were sent in by Señor Jorge Ortíz Méndez, Ingeniero Agrónomo, Jefe de la Secretaría de Agricultura e Industrias in Bucaramanga. A number of these field data permit a more complete undertanding of certain parts of the plant than could be had from a study of the type alone.

It is with pleasure that I thank Miss Inés de Zulueta for her accurate drawings of the fruiting portions of this new species.

Herrania umbratica R. E. Schultes, spec. nov.

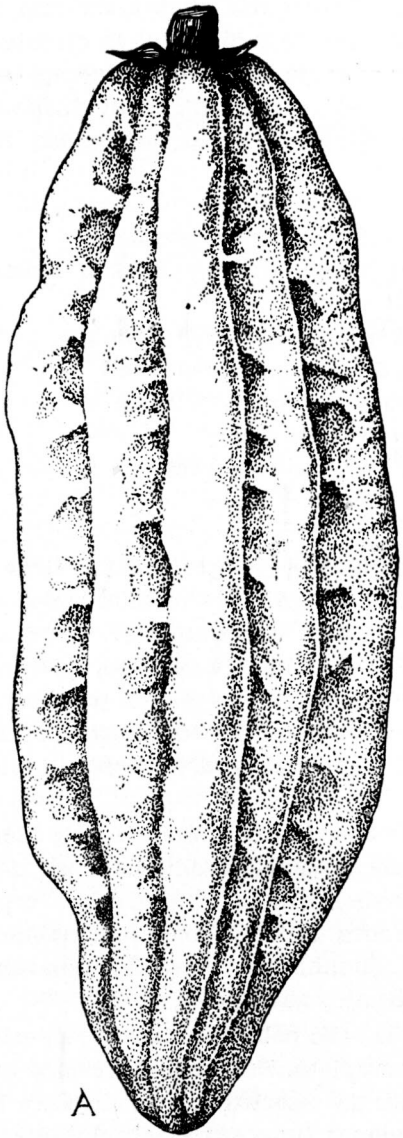
Arbuscula parva, tenuis gracilisque, usque ad quinque m. alta, ad apicem trunci ramosa; trunco erecto, in diametro (ex collectore) usque ad 15 - 18 cm., cum cortice in colore probabiliter fulvo-nigro; radice (ex collectore) profunda, fusiformi. Ramuli dense ferrugineo-tomentosi. Folia amplissima, digitata, longissime petiolata, septemfoliolata, stipulata. Stipulae non visae, sed (ex collectore) membranaceae, 3 - 6 cm. longae describuntur. Petioli robusti, subteretes sed obscure sulcati, basi laeviter dilatati, ferruginei, dense et molliter tomentosi, usque ad plus minusve 60 - 65 cm. longi, basi 10 mm. atque apice 4 - 5 mm. in diametro. Foliola inaequalia, sessilia, papyracea, lanceolato-oblonga, apice in cuspidem plus minusve acutum usque ad 2 cm. producta, basi subattenuato-cuneata, margine integra; laminis foliolarum centralium statu adulta 55 - 60 cm. longis (ex collectore

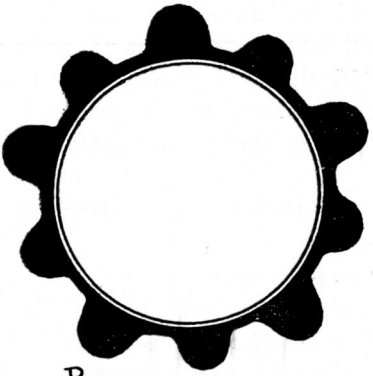
40 - 70 cm.), 20 - 22 cm. latis, lateralium minoribus, supra atroviridibus et subnitidis, glabris, in venis praecipuis minute et obscure ferrugineo-tomentosis, subtus in colore subaequalibus, minutissime et sparse stellato-pilosis, in venis potius densiore stellato-pilosis, nervis prominentibus. Inflorescentiae non visae, sed (ex collectore) fasciculatae describuntur. Flores mihi ignoti, sed in fructu reliquiis calycis persistentibus cum sepalis duo crasso-membranaceis, late ovatis, apice acutis, margine integris, stellato-pilosis, usque ad 20 mm. longis, 12 - 14 cm. latis. Fructus numerosi, in arbore (ex collectore) usque ad 45; elongato-ellipsoidei, conspicue irregulares, plerumque 11 - 14,5 cm. longi (ex collectore, usque ad 17 cm.) 4,5 - 5 cm. in diametro (ex collectore, usque ad 8 cm.), apice rotundo-obtusi, prope apicem non constricti, basi obtusi (non identati) atque pedunculati (pedunculo lignoso, usque ad 10 mm. longo, 4 mm. in diametro, articulato), cum costis subaequalibus, quinque cum costis primariis crassis, irregularibus, hebeto-rotundatisque, 6 - 8 mm. altis, 5 mm. latis, et quinque cum costis secundariis similibus sed potius minoribus, plus minusve 5 mm. altis, 5 mm. latis; inter costas aliquid striato-fibrosi, parsissime et aliquid grossiuscule pilosi cum pilis solis, albis, probabiliter urticantibus, usque ad 1,5 mm. longis, sine velutino; pericarpio crassulento-coriaceo vel sublignoso, 3-4 mm. lato; maturitate (ex-collectore) claro-flavi. Semina quadraginta-duo, circuitu triangularia vel angulato-ovata, complanata, 13 x 10 x 3 mm.; in pulpa firma alba inclusa (cum pulpa, 18 x 15 x 7 mm.).

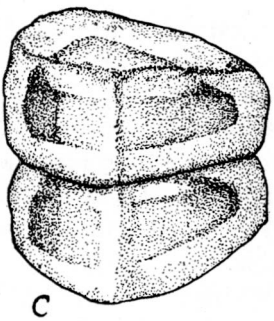
COLOMBIA: Departamento de Santander, Municipio de Girón region of "Capitancitos", alt. 695 m. In wet, shaded forest. *J. Ortiz Méndez sin. num.*, April, 1943. (TYPE in Herb. Nac. Colomb.).

Herrania umbratica is apparently most closely related to *H. nycterodendron* R. E. Schultes. This relationship is of the greatest phytogeographic interest since the former is known only from the western side of the Cordillera Oriental, in the Magdalena drainage of northern Colombia, and the latter is native to the Amazonian forests along the Río Putumayo.

The vegetative differences between *Herrania umbratica* and *H. nycterodendron* are indeed slight. However, the few remains of floral parts which were found hanging on the ripening fruits of *Herrania umbratica* would indicate that there are important floral differences between the two species.







Herrania umbratica R. E. Schultes
A. Side view (nat. size); — B. Cross-section (nat. size);
C. Seeds embedded in pulp (× 2); — D. Seed (× 2).

Drawn by Inés de Zulueta.

In gross morphology, the fruits of *Herrania umbratica* and *H. nycterodendron* are rather similar and are very different in structure and texture from the other two types of fruit found in this genus (see Caldasia, II, 6 (1943) 25-26) However, there are significant differences, outlined in the following table, which serve to distinguish the fruits of these two species.

Herrania nycterodendron	*Herrania umbratica*
regular	often irregularly wrinkled of twisted
long-pedunculate	short-pedunculate
basally indented	basally rounded, not indented
apically often constricted	apically seldom constricted
no coarse, stinging hairs	coarse, stinging (?) hairs
dense, soft velvet indument	no velvet indument
ribs (primary and secundary) very strongly unequal	ribs very nearly equal

According to information sent in by the collector, this species is found in nelghbouring regions around Girón: in the Municipios de San Vicente, Lebrija, Zapatoca, and Betulia. Unfortunately, there are no specimens from these localities. It would be advisable to make collections of this "cacao silvestre" in as many places as possible in Santander to establish its range. Flowering material would also greatly enhance our knowledge of this species and its possible relationships.

Regarding the habitat of *Herrania umbratica,* Señor Ortiz Méndez, writes: "... suelos francos, arenosos, areno-arcillosos... su desarrollo normal sólo se efectúa en medios bastante húmedos... crece y desarrolla indistintamente a la sombra de los árboles regionalmente conocidos con los nombres de: juanblanco, canalete, guarumo guamo, anaco, barba de mono, cocotinajo, gualanday, etc."

Concerning diseases of this species, the collector writes: "El estado sanitario del tronco y ramas es completo. En las mazorcas se encuentran casos esporádicos de ataques de insectos que no llegan a lesionar los granos. El ataque de afecciones fungosas es absolutamente negativo. Las hojas atacadas lo son en forma muy leve por algunos crisomélidos y minadores."